IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF NEW YORK

---

RENSSELAER POLYTECHNIC
INSTITUTE and DYNAMIC
ADVANCES, LLC,

                   Plaintiffs,

      v.

APPLE INC.,

                Defendant.

Civil Action No.
1:13-CV-0633 (DEP)

---

| APPEARANCES: | OF COUNSEL: |
|---|---|
| FOR PLAINTIFFS: | |
| SKIERMONT DERBY LLP<br>2200 Ross Avenue<br>Suite 4800W<br>Dallas, TX 75201 | PAUL J. SKIERMONT, ESQ.<br>DONALD E. TILLER, ESQ.<br>ALEXANDER E. GASSER, ESQ.<br>SHELLIE STEPHENS, ESQ. |
| HESLIN ROTHENBERG FARLEY<br>& MESITI P.C.<br>5 Columbia Circle<br>Albany, NY 12203 | NICHOLAS MESITI, ESQ. |
| HARRIS BEACH PLLC<br>333 West Washington Street<br>Suite 200<br>Syracuse, NY 13202 | JAMES R. MULDOON, ESQ.<br>STEVEN P. NONKES, ESQ. |

FOR DEFENDANT:

FENWICK & WEST LLP          HECTOR J. RIBERA, ESQ.
555 California Street        RYAN J. MARTON, ESQ.
12th Floor                  J. DAVID HADDEN, ESQ.
San Francisco, CA 94101     CAROLYN CHANG, ESQ.
                            JEFFREY A. WARE, ESQ.
                            WILLIAM A. MOSELEY, JR., ESQ.


MENTER, RUDIN               MITCHELL J. KATZ, ESQ.
& TRIVELPIECE, P.C.
308 Maltbie Street
Suite 200
Syracuse, NY 13204

DAVID E. PEEBLES
U.S. MAGISTRATE JUDGE

## DECISION AND ORDER[1]

Plaintiffs Rensselaer Polytechnic Institute ("RPI") and Dynamic

Advances, LLC ("Dynamic"), the owner of the patent in suit and an

exclusive licensee under the patent, respectively, have commenced this

action against defendant Apple Inc. ("Apple") alleging patent infringement.

The patent at issue discloses a method for processing a natural language

input provided by a user, utilizing searches of language-based databases

and transforming the input into a format that can then be used to access

and query various databases. Plaintiffs allege that Apple's Siri personal

assistant, available on such devices as iPhones and iPads, infringes the

---

[1]    This matter is before me on consent of the parties pursuant to 28 U.S.C. §
636(c). Dkt. No. 32.

claims of their patent. Apple has denied infringement, asserted several affirmative defenses, and counterclaimed seeking a declaratory judgment on the issues of non-infringement and patent invalidity.

Now that discovery in the action is closed, the parties have submitted a series of motions seeking both procedural and substantive relief. Procedurally, both sides have moved for preclusion of expert testimony on various grounds. In addition, both have moved for summary judgment with respect to the issue of infringement. For the reasons set forth below, all of the pending motions are denied.

I.    BACKGROUND

At the center of this case is United States Patent No. 7,177,798 ("'798 Patent"), issued on February 13, 2007, and entitled "Natural Language Interface Using Constrained Intermediate Dictionary of Results." Dkt. No. 1 at 2. The '798 Patent discloses innovations in the area of natural language processing ("NLP") used to process inputs in the form of natural language queries, including those in textual form or presented as verbal dialog. Dkt. No. 217-1 at 10-19. The patent lists Dr. Cheng Hsu, a professor at RPI, and Dr. Veera Boonjing, who teaches in Thailand, as the inventors, and RPI as the assignee of rights under the patent. Dkt. No. 1-1 at 2. Dynamic Advances, a limited liability company headquartered in

Texas, is the exclusive licensee to the '798 Patent, although it does not itself practice the patent. Dkt. No. 1 at 1. The '798 Patent was issued based upon an application filed on May 21, 2001, and traces its roots back to a continuation-in-part application filed on April 17, 2000, but later abandoned, and a provisional application filed on May 19, 2000. Dkt. No. 1-1 at 2.

The focus of the '798 Patent is upon a method for use in interpreting the meaning of an input so that it can be processed and acted upon, including through server-based systems.[2] '798 Patent, 2:23-3:67. To process the input, the invention employs metadata related to various application domains, as well as previous experience in processing natural language. *Id.* Among the sources called upon are four layers of enterprise data, or resources, including cases, keywords, information models, and database values. *Id.* The crux of the '798 Patent is the use of databases that ultimately may be searched in the second step, once the input is processed, to aid in processing and disambiguating the input. *Id.*

Since October 2011, Apple has offered Siri as part of its operating system on certain devices, including iPhones, iPads, and iPods. Dkt. No. 1 at 8; Dkt. No. 14 at 4-5. Apple describes Siri as a virtual personal assistant

---

[2]     The NLP disclosed in the '798 Patent will be described more particularly in part III.B.3.a. of this opinion.

designed to assist a user in performing such tasks as making restaurant

reservations, purchasing movie tickets, sending e-mails, and making

telephone calls. *E.g.*, Dkt. No. 227-18. Siri performs these tasks by ████

████████████████████████████████████████████████

████████████████████████████████████████████

████████████████████████████████████████ *Id.*; *see*

*also* Dkt. No. 209-17. Adam Cheyer, one of Siri's creators, has explained

the feature as follows:

████████████████████████████████████████

Dkt. No. 209-17 at 2-3. Plaintiffs contend that the method utilized by Siri to

process natural language inputs infringes at least ten of the '798 Patent's

claims.[3]

---

[3]    In their summary judgment motion, plaintiffs contend that they are entitled to a finding that Apple's use of Siri infringes Claims 1-2, 4-6, 9-11, 14, and 21 of the '798 Patent, as matter of law.

## II.   PROCEDURAL HISTORY

Dynamic, as an exclusive licensee under the '798 Patent, filed suit against Apple in this court on October 19, 2012, alleging infringement of the '798 Patent. *See Dynamic Advances, LLC v. Apple, Inc.*, No. 12-CV-1579. The instant action was subsequently commenced by Dynamic, joined by RPI, on June 3, 2013, and the first suit was discontinued without prejudice to the right of the parties to litigate, in this case, the claims and defenses previously interposed in that matter.

In their complaint, plaintiffs allege that Apple offers to sell and sells products infringing the '798 Patent, and specifically that Apple's Siri personal assistant infringes one or more of the'798 Patent claims. In response to plaintiffs' complaint, Apple has denied infringement and asserted various defenses and counterclaims including, *inter alia*, an affirmative defense and declaratory-judgment counterclaim relating to the defense of patent invalidity under 35 U.S.C. §§ 101, 102, 103, 112.

Following the issuance of a claim construction determination on June 12, 2014, Dkt. No. 104, and the completion of discovery, the parties have now submitted a series of motions. Both plaintiffs and Apple have moved for summary judgment in their favor concerning the issue of

infringement. Dkt. Nos. 209, 212.[4] In addition, both sides have requested

that the court strike certain expert reports and preclude expert testimony at

trial. Dkt. Nos. 208, 210, 211.[5] Oral argument was conducted in

connection with the parties' motions on June 26, 2015, at which time

decision was reserved on all pending motions.

III.   DISCUSSION

A.   Motions to Strike Expert Reports and Testimony

Both sides in this action have raised objections to certain expert

opinions being offered. Dkt. Nos. 208, 210, 211. Plaintiffs have moved to

strike a report attributed to Dr. James Allen, Apple's technical expert,

arguing that Apple personnel and its attorneys, rather than Dr. Allen,

actually prepared the report. Dkt. No. 208-2 at 6-19. Plaintiffs have also

asked that the court strike certain invalidity and damages opinions offered

by Dr. Allen on other grounds, including spoliation and unreliability. *Id.* at

19-29.

For its part, Apple has filed two motions directed toward expert

reports and opinions offered by plaintiffs. Dkt. Nos. 210, 211. In those

---

4       Apple's corresponding motion, not filed under seal, can be found at Dkt. No. 195, and plaintiffs' corresponding unsealed motion can be found at Dkt. No. 200. In this decision and order, I have cited to the parties' sealed motions and exhibits for their ease of reference.

5       The corresponding unsealed motions can be found at Dkt. Nos. 196, 197, 203, respectively.

motions, it seeks an order striking opinions of plaintiffs' technical expert,

Dr. Jaime Carbonell, contending that a new infringement theory was

unveiled for the first time in his rebuttal report. Dkt. No. 210 at 15-21.

Apple also challenges the damages expert report authored by Robert M.

Yerman, as well as any corresponding trial testimony, as inherently

unreliable. *See generally* Dkt. No. 211. Apple further seeks an order

striking the portions of the damages opinions rendered by Mr. Yerman that

were based upon a Siri iPhone deferred revenue analysis produced to

Apple for the first time during a lunch break at the expert's deposition. Dkt.

No. 210 at 10-15.

### 1.   Standard for Admission of Expert Testimony

The admission of expert testimony in a federal court action is

governed in the first instance by Rule 702 of the Federal Rules of

Evidence. That rule provides that

> [a] witness who is qualified as an expert by
> knowledge, skill, experience, training, or education
> may testify in the form of an opinion or otherwise if:
>
>> (a)   the expert's scientific, technical, or other
>> specialized knowledge will help the trier of fact
>> to understand the evidence or to determine a
>> fact in issue;
>>
>> (b)   the testimony is based on sufficient facts
>> or data;

(c)     the testimony is the product of reliable principles and methods; and

(d)     the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. When applying this standard to expert testimony offered by a party, a trial court must undertake a critical gatekeeping function to ensure "that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 597 (1993). While the *Daubert* standard governing admissibility must be satisfied even in the context of a bench trial, the concern regarding expert reliability is particularly acute in cases involving jury trials. *See, e.g., State of N.Y. v. Solvent Chem. Co., Inc.*, No. 83-CV-1401, 2006 WL 2640647, at *1 (W.D.N.Y. Sept. 14, 2006) ("The primary purpose of the holding[] in *Daubert* . . . is to protect juries from being bamboozled by technical evidence of dubious merit. Of course, this is not a prevailing concern where . . . the court functions as the trier of fact." (quotation marks and citations omitted)). As the Supreme Court has observed, "[e]xpert evidence can be both powerful and quite misleading because of the difficulty in evaluating it. Because of this risk, the judge in weighing possible prejudice against probative force under Rule 403 of the present

rules, exercises more control over experts than over lay witnesses."

*Daubert*, 509 U.S. at 695 (quotation marks omitted); *see also Apple, Inc. v. Samsung Elecs. Co., Ltd.,* No. 12-CV-00630, 2014 WL 794328, at *8 (N.D. Cal. Feb. 25, 2014).

District courts are vested with broad discretion in assessing the reliability of an expert report. *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 158 (1999). Under the governing rules, the trial court's task is to exclude evidence that is "based upon unreliable principles or methods, or legally insufficient facts and data." *Apple, Inc. v. Motorola*, *Inc.*, 757 F.3d 1286, 1314 (Fed. Cir. 2014), *overruled on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015)).

While this discretionary authority includes the responsibility to review the soundness of methodologies relied upon by an expert, Rule 702 does not command rejection of opinions based merely upon the court's disagreement with the conclusions reached or the correctness of the opinions offered. *See Daubert*, 509 U.S. at 595 ("The focus, of course, must be solely on principles and methodology, not on the conclusions they generate."); *Cornell Univ. v. Hewlett-Packard Co.*, No. 01-CV-1974, 2008 WL 2222189, at *1 (N.D.N.Y. May 27, 2008) (Rader, J., sitting by designation) ("Determination of the correctness of an expert's conclusions

is the province of the jury[.]"). As the Federal Circuit has noted,

> [a] judge must be cautious not to overstep its
> gatekeeping role and weigh facts, evaluate the
> correctness of conclusions, impose its own
> preferred methodology, or judge credibility,
> including the credibility of one expert over another.
> These tasks are solely reserved for the fact finder.

*Apple, Inc.*, 757 F.3d at 1314. The need to limit the exercise of the court's

oversight responsibility to excluding only testimony based upon unreliable

principles and methods is particularly "essential in the context of patent

damages." *Id.* at 1315. This limitation is in recognition of the established

principle that it is for the jury to decide "which facts are most relevant or

reliable to calculating a reasonably royalty[.]" *Id.* (citing *i4i Ltd. P'ship v.*

*Microsoft Corp.*, 598 F.3d 831, 836 (Fed. Cir. 2010)).

Whether a proffered expert opinion is sufficiently reliable is informed

by certain relevant factors, including (1) whether the theory or technique

can be (and has been) tested; (2) whether it has been subjected to peer

review and publication; (3) the degree of known or potential rate of error;

and (4) whether the theory or technique has gained a degree of

acceptance within the pertinent scientific or technical community. *Daubert*,

509 U.S. at 592-94. "'General acceptance[,]' [however,] is not a necessary

precondition to the admissibility of scientific evidence under the Federal

Rules of Evidence, but the Rules of Evidence – especially Rule 702 do

assign to the trial judge the task of ensuring that an expert's testimony

both rests on a reliable foundation and is relevant to the task at hand." *Id.*

at 597. Importantly, while both Rule 702 and the Supreme Court's

decisions in *Daubert*, and later in *Kumho Tire Co., Ltd. v. Carmichael*, 526

U.S. 137 (1999), identify specific factors bearing on the question of

reliability, courts have stressed that "the *Daubert* inquiry is fluid and will

necessarily vary from case to case." *Amorgianos v. Nat'l R.R. Passenger

Corp.*, 303 F.3d 256, 266 (2d Cir. 2002); *see also Daubert*, 509 U.S. at

594. Although in the first instance the burden of establishing the

admissibility of expert testimony in question rests with the proponent, any

doubts as to whether the expert's testimony will be useful should be

resolved in favor of admissibility. *Lappe v. Am. Honda Motor Co., Inc.,* 857

F. Supp. 222, 226 (N.D.N.Y. 1994) (Hurd, M.J.).

        2.    Requirements of Rule 26(a)(2)

        Adding to the dictates of Rule 702 and *Daubert* is Rule 26(a)(2) of

the Federal Rules of Civil Procedure, which sets out certain obligations for

the disclosure of expert testimony. In relevant part, that rule provides as

follows:

(a) Required Disclosures . . .

(2) *Disclosure of Expert Testimony . . . .*

(B) *Witnesses Who Must Provide a Written Report.* Unless otherwise stipulated or ordered by the court, this disclosure must be accompanied by a written report—prepared and signed by the witness—if the witness is one retained or specially employed to provide expert testimony in the case or one whose duties as the party's employee regularly involve giving expert testimony. The report must contain:

(i) a complete statement of all opinions the witness will express and the basis and reasons for them;

(ii) the facts or data considered by the witness in forming them; and

(iii) any exhibits that will be used to summarize or support them[.]

Fed. R. Civ. P. 26(a)(2)(B)(i-iii); *Optigen, LLC v. Int'l Genetics, Inc.*, 877 F. Supp. 2d 33, 44 n.7 (N.D.N.Y. 2012) (Suddaby, C.J.); *Bekaert Corp. v. City of Dyersburg*, 256 F.R.D. 573, 578 (W.D. Tenn. 2009). An expert's report fails to meet the requirements of Rule 26(a) if it does not disclose the basis and reasoning underlying the opinions set forth within it. *Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1373-74 (Fed. Cir. 2008).

Absent either substantial justification or a finding that the omission is

harmless, the controlling rules require that a failure to comply Rule 26(a)

should result in exclusion of an expert's report. Fed. R. Civ. P. 37(c)(1);

*see also Advanced Fiber Techs. Trust v. J & L Fiber Servs., Inc.*, No. 07-

CV-1191, 2010 WL 1930569, at *2 (N.D.N.Y. May 11, 2010) (Kahn, J.).

While the language of Rule 37(c)(1) suggests that exclusion of the expert's

report for failing to meet the mandates of Rule 26(a) is mandatory, the

Second Circuit has nonetheless tempered the impact of the rule by

outlining certain relevant factors to be considered when determining

whether to preclude expert testimony.[6] *Softel, Inc. v. Dragon Med. &*

*Scientific Commc'ns, Inc.*, 118 F.3d 955, 961 (2d Cir. 1997). In particular,

the court in *Softel* identified the following factors to be considered in

determining whether a court has abused its discretion in ordering

preclusion:

> (1) the party's explanation of the failure to comply
> with the discovery order; (2) the importance of the
> testimony of the precluded witness; (3) the prejudice
> suffered by the opposing party as a result of having
> to prepare to meet the new testimony; and (4) the
> possibility of a continuance.

*Softel, Inc.*, 118 F.3d at 961.

---

[6]     Although Federal Circuit law governs the substantive issues in a patent case such as this, matters involving procedural questions, including those related to discovery and evidentiary issues, such as admissibility of expert testimony, are subject to the law of the circuit in which the trial court sits. *LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 66 (Fed. Cir. 2012).

## 3.    Plaintiffs' Motion to Strike Dr. James Allen's Expert Report

Dr. James Allen, an expert in the fields of artificial intelligence and

NLP, was retained by Apple and has authored multiple reports on its

behalf concerning the issues of patent validity and infringement. Dkt. Nos.

208-3, 209-13. In their motion, plaintiffs do not challenge the qualifications

of Dr. Allen to serve as an expert witness.[7] *See generally* Dkt. No. 208-2.

Instead, they argue that his invalidity report was actually prepared by

Apple's counsel, rather than Dr. Allen, or, at best, represents the product

of a collaborative effort, and that the significant involvement of Apple's

counsel precludes a finding that the report satisfies the requirements of

Rule 26(a)(2). *Id.* at 6-22. Plaintiffs also argue that the report should be

suppressed due to Dr. Allen's failure to preserve notes generated by him

during interviews with four individuals, conducted in furtherance of his

invalidity analysis. *Id.* at 22-25. Lastly, plaintiffs challenge the reliability of

Dr. Allen's opinions concerning non-infringing alternatives and

apportionment of the value of the '798 Patent to Siri, offered in his January

---

[7]    The expertise of Dr. Allen, who is currently a Professor of Computer Science at the University of Rochester and a founding fellow of the Association for the Advancement of Artificial Intelligence, Dkt. No. 208-3 at 6-7, is expressly recognized by the '798 inventors in their patent. *See* '798 Patent, 13:9-13 ("Natural language processors are well-known, and functions they perform are described in more detail in the book entitled *Natural Language Understanding*, by James Allen, Benjamin/Cummings Publishing Company, Inc., Redwood City, Calif., 1994, herein incorporated by reference.").

15, 2015 report concerning non-infringement. *Id.* at 25-29. For those reasons, plaintiffs request that the court issue an order striking portions of Dr. Allen's reports and precluding him from testifying at trial concerning the opinions that are the subject of their motion. *Id.* at 29.

### a.      Ghost Writing

The Federal Rules of Civil Procedure require that a report of an expert retained to testify at trial must be "prepared and signed by the witness." Fed. R. Civ. P. 26(a)(2)(B); *see also Rouson v. Eicoff*, No. 04-CV-2734, 2007 WL 1827422, at *8 (E.D.N.Y. June 25, 2007). Obviously, the explicit language of Rule 26(a)(2)(B) does not contemplate a party or its counsel preparing a report for an expert witness. Fed. R. Civ. P. 26(a)(2)(B). As one court has noted,

> [w]e doubt the value to the trier of fact of a hired expert's opinion when the party hiring him has put words in his mouth – or in this case, in his report – leaving him, in essence a highly qualified puppet.

*DataQuill Ltd. v. Handspring, Inc.*, No. 01-CV-4635, 2003 WL 737785, at *4 (N.D. Ill. Feb. 28, 2003); *see also Play Visions, Inc. v. Dollar Tree Stores, Inc.*, No. 09-CV-1769, 2011 WL 2292326, at *9 (W.D. Wash. June 8, 2011) ("[A]n expert must independently draft and edit his own report, not merely review counsel's idealized version of what such a report may contain."); *Bekaert Corp. v. City of Dyersburg*, 256 F.R.D. at 573, 579

(W.D. Tenn. 2009) (excluding an expert report where evidence showed that it was originally prepared by counsel for the party retaining the expert).

The language of Rule 26(a)(2)(B), however, does not necessarily preclude an attorney for the party retaining an expert from having some role in preparation of the expert's report, if for no other reason than to insure the report's compliance with the governing rules. *Numatics, Inc. v. Balluff, Inc.*, 66 F. Supp. 3d 934, 942 (E.D. Mich. 2014). The Advisory Committee Notes accompanying the 1993 amendments to Rule 26 specifically recognize the reality of attorney involvement, noting as follows:

> Rule 26(a)(2)(B) does not preclude counsel from providing assistance to experts in preparing the reports, and indeed, with experts such as automobile mechanics, this assistance may be needed. Nevertheless, the report, which is intended to set forth the substance of the direct examination, should be written in a manner that reflects the testimony to be given by the witness and it must be signed by the witness.

Fed. R. Civ. P. 26 , Advisory Committee Note (1993). Accordingly, some degree of attorney participation in the drafting of an expert report is not fatal to the admissibility of that report, provided that the expert was substantially involved in its preparation. *Keystone Mfg. Co., Inc. v. Jaccard Corp.*, 394 F. Supp. 2d 543, 568 (W.D.N.Y. 2005) ("[A]ttorneys are not

precluded from assisting expert witnesses in the preparation of their reports so long as the witness remains substantially involved."); *see also Rouson*, 2007 WL1827422, at *8; *Bekaert Corp.*, 256 F.R.D. at 578. As one court has observed,

> [p]rovided the substance of the opinions is from the expert, the attorney's involvement in preparing the report generally does not render the expert's opinions inadmissible. However, preparing a report implies involvement other than reviewing a report drafted by someone else and signing one's name in agreement with the contents.

*United States ex rel Barron v. Deloitte & Touche, LLP*, No. SA-99-CA-1093-FB, 2008 WL 7136868, at *3 (W.D. Tex. Sept. 26, 2008).

The question of whether an expert was substantially involved in the preparation of a report, notwithstanding attorney input, is necessarily fact specific. *Numatics, Inc.*, 66 F. Supp. 3d at 943. Cases at either end of the spectrum are easily decided. When an attorney has assisted in "fine-tuning" an expert's report in order to insure compliance with the applicable requirements, including Rule 26(a)(2)(B), the report is not subject to preclusion. *Numatics*, 66 F. Supp. 3d at 942. On the other hand, "preparing the expert's opinion from whole cloth and then asking the expert to sign it if he or she wishes to adopt it is not [permissible under Rule 26]." *Id.* (quotation marks omitted). Circumstances falling in between

these two extremes present the more difficult challenges. In the end,

however, the pivotal inquiry is whether the expert can be said to have

substantially participated in the preparation of his report. [8] *See, e.g.,*

*Keystone Mfg. Co.*, 394 F. Supp. 2d at 568 (denying motion to exclude

expert's report where the evidence reflected that the expert "was

substantially involved in the preparation of [the] expert report and that the

opinions contained therein [were] his"); *Bekaert Corp.*, 256 F.R.D. at 579

("In analyzing whether counsel's participation has so exceeded the bounds

of legitimate assistance as to negate the possibility that Mr. Hynes actually

prepared his own report, the Court must determine if Mr. Hynes

substantially participated in the preparation of his declaration.").

In this case the record, while somewhat equivocal, fails to lead

inexorably to the conclusion that Dr. Allen's report was ghostwritten by

defendant's counsel and should therefore be stricken. Dr. Allen was

retained by Apple in March of 2013 to render advice regarding the validity

of the '798 Patent.[9] Dkt. No. 208-3 at 6; Dkt. No. 229-1 at 3-4. Prior to his

---

[8]     Examination of the process leading to preparation of a final expert report, and a
determination of the extent of relative input from counsel and the expert, is now
somewhat hampered by the 2010 amendment to Rule 26(b)(4) of the Federal Rules of
Civil Procedure, which protects, as work product, drafts of any expert report required
under Rule 26(a)(2).

[9]     Dr. Allen signed a formal engagement letter covering the terms of his retention
on April 4, 2013. Dkt. No. 242-2 at 2.

engagement by Apple, Dr. Allen had never served as an expert witness in

a lawsuit, nor had he ever testified at a deposition before being deposed in

this case. Dkt. No. 229-1 at 3. Dr. Allen's efforts on behalf of Apple

included assistance in connection with *inter partes* review ("IPR")

proceedings pending before the United States Patent and Trademark

Office's Patent and Trademark Appeals Board ("PTAB"), and later, the

preparation of expert reports and rendering of deposition testimony in

connection with this lawsuit.[10] Dkt. No. 229-1 at 3-5. In carrying out his

assigned task, Dr. Allen reviewed many sources of information, including

patents, publications, and other documents, and interviewed various

relevant witnesses.[11] *Id.* at 5; *see also* Dkt. No. 208-3 at 8-9; Dkt. No. 208-

4.

---

[10]    It appears fairly certain that Dr. Allen was not involved in preparation of Apple's initial invalidity contentions, which were served on April 4, 2014, at or about the time of his retention, and which cited nineteen prior art references. It also appears that Dr. Allen had minimal, if any, involvement in the preparation of Apple's supplemental invalidity contentions that were served shortly thereafter on April 25, 2013, and disclosed twenty-two prior art references. The initial and supplemental invalidity contentions, as well as second supplemental invalidity contentions asserted by Apple on August 25, 2014, do not appear in the record currently before the court.

[11]    In his report, Dr. Allen specifically identifies and discusses thirteen prior art references that either anticipate or, in various combinations, render obvious, the invention disclosed in the '798 Patent. *See* Dkt. No. 208-03 at 42-144. According to Dr. Allen, at least one of those, the Janas reference, was not identified in either Apple's initial or first supplemental invalidity contentions, served in April 2014. Dkt. No. 242-9 at 121-22.

According to Dr. Allen, based upon the information obtained by him from the sources consulted, he "either drafted sections of [his] report or reviewed and edited sections provided by Apple's counsel to include any relevant information [he] learned from these conversations." Dkt. No. 229-1 at 5. Dr. Allen also notes that he previously provided input with respect to many materials offered by Apple in preparation of the report. *Id.* In his declaration in opposition to plaintiffs' motion to strike, Dr. Allen unequivocally states that "[he] drafted or reviewed and edited every page of [his] Invalidity Report." *Id.* In performing those tasks, Dr. Allen spent more than one hundred hours, as is reflected in invoices to Apple for his services in the case.[12] Dkt. No. 208-5.

The remedy of preclusion of evidence, now sought by the plaintiffs, is a particularly harsh remedy, and as such should only sparingly be exercised. *Outley v. N.Y.*, 837 F.3d 587, 591 (2d Cir. 1988). Although it is clear that Apple's counsel provided significant assistance in the production of Dr. Allen's report, especially considering there were fifteen iterations of the report prior to it becoming final, the evidence does not convincingly

---

[12]    To place this statistic in context, plaintiffs' expert, Dr. Jaime Carbonell, billed plaintiffs for approximately 147 hours in connection with his work as an expert on the issue of infringement. Dkt. No. 242-10. Dr. Carbonell's opening expert report on the issue of infringement is comprised of 654 pages, including attachments, and lists 231 documents considered, containing a total of at least 13,315 pages of information. Dkt. No. 242-4 at 3.

establish that Dr. Allen was not substantially involved in its preparation and in formulating the opinions contained in the report. Having considered the relevant factors set forth in *Softel* in light of the record evidence, I find that the assistance of Apple's counsel in the preparation of Dr. Allen's report merely provides a basis for vigorous cross-examination, and to challenge the integrity of the report before the factfinder, but does not warrant the ultimate sanction of preclusion. This portion of plaintiffs' motion is therefore denied.

b.      Spoliation

Plaintiffs next urge the court to strike Dr. Allen's report and expert testimony based upon his failure to preserve notes of conversations with four authors of prior art references relied upon in his invalidity report, including Bill Halpern (Symantec Q&A ("Symantec")), Adam Cheyer (Open Agent Architecture ("OAA")), Wesley Chu (Database Query Formation from Natural Language using Semantic Modeling and Statistical Keyword Meaning Disambiguation ("Meng & Chu")), and Babak Hodjat (Dejima, Inc. Adaptive Agent-Oriented Software Application Platform ("Dejima")). Dkt. No. 208-3 at 22-25. Plaintiffs argue that the failure to preserve those notes, particularly in view of Dr. Allen's poor recollection of his conversations with those individuals as demonstrated during his

deposition, should result in a finding of spoliation and preclusion of his testimony on this basis. *Id.*

Spoliation is defined as "the destruction or significant alteration of evidence, or the failure to preserve property for another's use as evidence in pending or reasonably foreseeable litigation." *West v. Goodyear Tire & Rubber Co.*, 167 F.3d 776, 779 (2d Cir. 1999); *see also Aktas v. JMC Dev. Co., Inc.*, 877 F. Supp. 2d 1, 12 (N.D.N.Y. 2012) (D'Agostino, J.). To warrant the imposition of sanctions based upon the destruction of evidence, a moving party must demonstrate "(1) that the party having control over the evidence had an obligation to preserve it at the time it was destroyed; (2) that the records were destroyed with a culpable state of mind; and (3) that the destroyed evidence was relevant to the party's claim or defense such that a reasonable trier of fact could find that it would support that claim or defense." *Chin v. Port Auth. of N.Y. & N.J.*, 685 F.3d 135, 162 (2d Cir. 2012) (quotation marks omitted); *Wade v. Tiffin Motorhomes, Inc.*, 686 F. Supp. 2d 174, 193 (N.D.N.Y. 2009) (Suddaby, C.J.); *Aktas*, 877 F. Supp. 2d at 12. The decision of whether to award sanctions based upon lost evidence rests within the discretion of the trial court. *Chin*, 685 F.3d at 162; *West*, 167 F.3d at 779.

In this instance, neither Rule 26(a) nor any established legal

principle required Dr. Allen to preserve the notes of his conversations with

the four individuals interviewed by him. Indeed, the only plausible basis for

preservation would have been to make them available for discovery. In

this instance, however, the parties specifically exempted such notes from

discovery in their stipulated protective order.[13]

Based upon my finding that Dr. Allen was under no obligation to

retain the notes of the conversations in issue, I conclude that plaintiffs

have failed to demonstrate a basis to strike his report or to issue any other

sanction as a result of the failure to preserve those notes.

### c.    Reliability of Portions of Dr. Allen's Infringement Report

The last issue raised in plaintiffs' motion to strike concerns the

reliability of two portions of Dr. Allen's infringement report that address (1)

Dr. Carbonell's valuation of the '798 Patent, and (2) Dr. Allen's opinions

regarding a non-infringing design-around that could be achieved through a

simple modification of Siri. Dkt. No. 208-2 at 25-29. In his report, Dr. Allen

---

[13]    The stipulated protective order entered in this case pursuant to Rule 26(c) of the
Federal Rules of Civil Procedure provides, in pertinent part, as follows:

> Testifying experts shall not be subject to discovery with
> respect to any draft of his or her report(s) in this case. Draft
> reports, notes, or outlines for draft reports developed and
> drafted by the testifying expert and/or his or her staff are
> also exempt from discovery.

*Dynamic Advances, LLC*, No. 12-CV-1579, Dkt. No. 55 at 38.

explained that, even assuming validity and infringement of the '798 Patent,

Dr. Carbonell's opinions concerning valuation are overstated because the

relative contribution of the '798 Patent to the value of Siri would be

minimal under any of several relevant benchmarks. Dkt. No. 209-13 at 47-

58. Dr. Allen's report details the quantitative and qualitative facts upon

which his opinions in this regard are based. *Id.* When deposing Dr. Allen,

however, plaintiffs chose to focus on only one of the twenty-seven

paragraphs addressing the issue, specifically posing questions regarding

the expert's quantitative analysis. Dkt. No. 242-8 at 250-56. I have

carefully reviewed plaintiffs' motion and Dr. Allen's rebuttal report and find

no basis to preclude his opinions concerning valuation.

Dr. Allen's report also offers a non-infringing design-around, claimed

by him to involve a simple modification of Siri, such as removal of case

information from the program's active ontology. Dkt. No. 209-13 at 105-10.

Plaintiffs contend that this alternative is not reliable because it "still has to

be designed and brought to market." Dkt. No. 208-2 at 26. In support of

this argument, plaintiffs cite *Mars, Inc. v. Coin Acceptors, Inc.*, 527 F.3d

1359 (Fed. Cir. 2008). Dkt. No. 208-2 at 26. *Mars*, however, does not hold

that an alternative must be in existence at the time of the hypothetical

negotiation to be a reliable basis for adjustment of the reasonable royalty

calculation to reflect the royalty the accused infringer would have paid over and above the cost of avoiding infringement. Instead, in *Mars*, the Federal Circuit affirmed the district court's reduction of the reasonable royalty rate based on a potentially available non-infringing alternative that the defendant "did not have—but probably could have designed." *Mars, Inc.*, 527 F.3d at 1373. Dr. Allen stated in his report that the non-infringing alternative envisioned by him could have been easily implemented at little cost, thereby providing sufficient information to allow a jury to determine the costs and viability associated with Apple's proposed non-infringing alternative. Dkt. No. 209-13 at 108. In addition, plaintiffs' argument that ██

████████████████████████████████████████████████████

████████████████████████████████████████████████████

███████████████████████████████████████████

████████████████████████████████████████████████████

████████████████████ Dkt. No. 242-11 at 3, 5 n.2.

In sum, while it is clear that plaintiffs quarrel with several conclusions rendered by Dr. Allen in his infringement report, none of the grounds for disagreement necessarily strip the report free of any reliability. Accordingly, while plaintiffs' arguments may provide fodder for cross-examination of Dr. Allen at trial, they do not form a basis to preclude his

opinion testimony. Accordingly, plaintiffs' motion to strike portions of Dr.

Allen's infringement report for reasons of unreliability is denied.

        4.      <u>Apple's Motion to Exclude Testimony of Robert</u>
                    <u>Yerman as Unreliable</u>

In support of their claim for damages, plaintiffs have disclosed an

expert report, dated December 15, 2014, authored by Robert N. Yerman,

a certified public accountant and business consultant with considerable

experience in matters involving intellectual property. Dkt. No. 211-3. In his

report, Mr. Yerman offers his opinions concerning a reasonable royalty

under a license to the '798 Patent utilizing two distinct methods – an

analytical approach and a hypothetical negotiation approach. Dkt. No.

211-3 at 39-108.

The analytical approach, which has been endorsed by the Federal

Circuit,[14] "attempts to place a quantitative value on benefits derived from

the use of the patented technology[.]" Dkt. No. 211-3 at 39; *see also*

*Lucent Techs., Inc.*, 580 F.3d at 1324 ("[T]he analytical method[] focuses

on the infringer's projections of profit for the infringing product."). Mr.

Yerman has calculated plaintiffs' damages, in the event a factfinder

concludes Apple has infringed the '798 Patent, utilizing the analytical

---

[14]    *See, e.g., Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301 (Fed. Cir. 2009); *TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895 (Fed. Cir. 1986).

model, to be $429 million. Dkt. No. 211-3 at 42.

The hypothetical negotiation analysis represents a more traditional method of proving damages, giving consideration to the well-established *Georgia-Pacific*[15] economic factors, and attempts to predict the "appropriate reasonable royalty for allegedly infringing sales or uses made of the patented inventions" based on a hypothetical negotiation between the parties for a license under the '798 Patent. Dkt. No. 211-3 at 37; *see also Lucent Techs., Inc.*, 580 F.3d at 1324 ("The second, more common approach, called the hypothetical negotiation or the 'willing licensor-willing licensee' approach, attempts to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began."). As a result of his analysis under the hypothetical negotiation approach, Mr. Yerman concludes that an appropriate damage award, in the event infringement is proven, would be between $175 and $200 million. Dkt. No. 211-3 at 107. Apple has moved to preclude Mr. Yerman from testifying at trial concerning his damage analysis under either of these theories, arguing that his report is replete with errors and based upon false assumptions, rendering his opinions

---

[15]     *Georgia-Pac. Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970).

inherently unreliable. *See generally* Dkt. No. 211.

When infringement is proven, a patentee is entitled to "damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer[.]" 35 U.S.C § 284; *see Whitserve, LLC v. Comput. Packages, Inc.*, 694 F.3d 10, 26 (Fed. Cir. 2012). Damages for patent infringement are typically awarded under either a lost profits paradigm, best suited for when the parties are direct competitors, or a reasonable royalty model. *Whitserve*, 694 F.3d at 26 (citing *Lucent Techs., Inc.*, 580 F.3d at 1324).

In his report, Mr. Yerman has offered opinions regarding damages for defendant's alleged infringement of the '798 Patent, applying the reasonable royalty method. Dkt. No. 211-3 at 39. His opinions must be analyzed in the context of certain well-established principles. First, as the Federal Circuit has recognized, "estimating a 'reasonable royalty' is not an exact science." *Apple, Inc.*, 757 F.3d at 1315. In addition, there is more than one recognized method for estimating a reasonable royalty. *Id.* "For example, a party may use the royalty rate from sufficiently comparable licenses, value the infringed features based upon comparable features in the marketplace, or estimate the value of the benefit provided by the infringed features by a comparing [sic] the accused product to non-

infringing alternatives." *Id.*

In this case, the challenge faced by Mr. Yerman under both the analytical and hypothetical negotiation constructs was parsing the worth of the allegedly infringing NLP method from the full value of Siri, with all of its diverse functionality. The expert's task was further complicated by the difficulty in valuing Siri itself. Apple does not offer the allegedly infringing NLP method as a standalone, nor is there a sales price associated with Siri by itself. In addition, Apple has consistently maintained that it does not attribute, for internal purposes or otherwise, a specific value for Siri to the products in which it is located, including iPhones and iPads. In a similar context, the Federal Circuit has observed the following:

> We begin by noting that some products are made of many different components, one or more of which components may be covered by an asserted patent, while other components are not. This is especially true for electronic devices, which may include dozens of distinct components, many of which may be separately patented, the patents often being owned by different entities. To assess how much value each patented and non-patented component individual contributes to the overall end of product—e.g., a personal computer—can be an exceedingly difficult and error-prone task.

*LaserDynamics, Inc.*, 694 F.3d at 66.

Given this reality, in order to ascertain the value attributable to the allegedly infringing NLP method, Mr. Yerman set about the difficult task of

determining the key metric – the value of the '798 Patent technology to Siri, and, in turn, to those devices in which Siri is installed. Mr. Yerman began by analyzing available data and information concerning the value of Siri and its importance to customers who have purchased devices such as iPhones and iPads. Relying on marketing information as well as the results of consumer surveys – surveys upon which Apple itself placed great reliance in support of its infringement claims in *Apple, Inc. v. Samsung Elec. Co., Ltd.*, No. 12-CV-0630 (N.D. Cal. filed 2012) – Mr. Yerman concluded that Siri is a significant driver of customer demand for Apple smartphones. As a starting point, Mr. Yerman used the $100 differential in price between the iPhone4, which did not offer Siri, and the iPhone 4s, which did, as well as the $100 price disparity between comparable iPhone 4s and 5 models, when both were being contemporaneously marketed. Dkt. No. 211-3 at 40-41. Analyzing the results of Apple iPhone surveys, Mr. Yerman noted that, ███████████

███████████████████████████████████████████

███████████████████████████████████████████

███████████████████████████████████████████ [16] *Id.*

_____

[16] ███████████████████████████████████

███████████████████████████████████████████

at 41. He also observed that the survey results reflected ▮

██████████████████████████████████████████████████████

████████████████████████████████ *Id.* at 41. Mr. Yerman then

determined the actual gross margins associated with relevant Apple

products, including iPhones, iPads, and iPods for the period of October

2011 through September of 2014, and concluded that the profit

attributable to Siri on iPhone devices sold in the relevant geographic

markets approximated $1.287 billion. *Id.* at 41-42. Mr. Yerman next

estimated the value of the '798 Patent technology to Siri as being one of

the three main components, and therefore divided Apple's profits by three

to reach his final opinion, utilizing the analytical approach, concluding that,

in the event of a finding of infringement, plaintiffs should be entitled to

recover "approximately $429 million in damages."[17] *Id.* at 42.

    The focus of Mr. Yerman's alternative, hypothetical negotiation

---

██████████████████████████████████████████████████████

██████████████████████████████████████████████████████

17 ███████████████████████████████████████████████████

██████████████████████████████████████████████████████

██████████████████████████████████████████████████████

approach was on the fifteen familiar *Georgia-Pacific* factors.[18] Dkt. No.

---

[18]      The *Georgia-Pacific* factors include the following:

     1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.
     2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
     3. The nature and scope of the license, as exclusive or non-exclusive, or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
     4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
     5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business, or whether they are inventor and promoter.
     6. The effect of selling the patented specialty in promoting sales of other products of the licensee, the existing value of the invention to the licensor as a generator of sales of his non-patented items, and the extent of such derivative or convoyed sales.
     7. The duration of the patent and the term of the license.
     8. The established profitability of the product made under the patent, its commercial success, and its current popularity.
     9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.
     10. The nature of the patented invention, the character of the commercial embodiment of it as owned and produced by the licensor, and the benefits to those who have used the invention.
     11. The extent to which the infringer has made use of the invention, and any evidence probative of the value of that use.
     12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.
     13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
     14. The opinion testimony of qualified experts.

211-3 at 42. The expert first separated the factors into four groupings,

including (1) factors three and seven, identifying the parameters of the

license at issue; (2) factors one, two, and twelve, which examine whether

other licenses provide useful information, including established industry

pricing for the technology at issue or similar technology;[19] (3) factors four

and five, requiring consideration of whether the licensor has a policy of not

licensing others in order to maintain a patent monopoly; and (4) six, eight

through eleven, and thirteen, requiring examination of the benefits to the

licensee of obtaining a license. *Id.* at 43-99. After surveying the available

data and applying the *Georgia-Pacific* factors, including factors fourteen

---

15. The amount that a licensor (such as the patentee) and a
licensee (such as the infringer) would have agreed upon (at the
time the infringement began) if both had been reasonably and
voluntarily trying to reach an agreement; that is, the amount which
a prudent licensee— who desired, as a business proposition, to
obtain a license to manufacture and sell a particular article
embodying the patented invention— would have been willing to pay
as a royalty and yet be able to make a reasonable profit and which
amount would have been acceptable by a prudent patentee who
was willing to grant a license.

*Georgia-Pacific Corp.*, 318 F. Supp. at 1120; *see also Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1317 (Fed. Cir. 2011).

[19]     When discerning an appropriate royalty rate, a patentee must look to licenses that are sufficiently comparable to the hypothetical license that would be issued under the patent in suit. *Virnetx, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1330 (Fed. Cir. 2014) (citing *Lucent Techs., Inc.*, 580 F.3d at 1325). Addressing this step, the Federal Circuit has "never required identity of circumstances," in recognition of the reality that "any reasonable royalty analysis necessarily involves an element of approximation and uncertainty. " *Virnetx, Inc.*, 767 F.3d at 1330 (quotation marks omitted).

and fifteen, which examine the opinion of other experts and the parties'

bargaining positions, Mr. Yerman concluded that a hypothetical

negotiation would have resulted in a license, for the remaining life of the

'798 Patent, costing Apple between $175 and $200 million in royalties. *Id.*

at 39, 991-08.

In its motion, Apple levels criticism at Mr. Yerman's methodology and

assumptions, inviting the court to invoke the harshest of available

remedies – preclusion of his testimony. *See generally* Dkt. No. 211. Both

under the law of this circuit, *see Info-Hold v. Muzak LLC*, 783 F.3d 1365,

1371 (Fed. Cir. 2015) ("For issues not unique to patent law, we apply the

law of the regional circuit"), and generally, the wholesale preclusion of an

expert's testimony regarding damages in a patent infringement action, as

in any other, is a severe remedy, which can, in some cases, prove fatal to

a plaintiff's damage claim, serving as a barrier to the recovery of past

damages for infringement. *See, e.g.,* Fed. R. Evid. 702, Advisory Comm.

Note (2000) ("[R]ejection of expert testimony is the exception rather than

the rule."); *Toborg v. United States*, No. 11-CV-0150, 2012 WL 3643841,

at *2 (N.D.N.Y. Aug. 23, 2012) (Sharpe, J.) (finding that exclusion of the

testimony of the defendant's expert "too harsh a sanction"). Moreover, the

Supreme Court has noted that "[v]igorous cross-examination, presentation

of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Daubert*, 509 U.S. at 596; *accord, i4i Ltd. P'ship*, 598 F.3d at 856; *see also Whitserve*, 694 F.3d at 29.

Of paramount concern, when exercising the court's gatekeeping responsibilities, is whether sound and generally accepted methodolody has been applied by the expert. "While questions regarding which facts are most relevant for calculating a reasonable royalty are properly left to the jury, a critical prerequisite is that the underlying methodology be sound." *Virnetx, Inc.*, 767 F.3d at 1308. "The law requires patentees to apportion the royalty down to a reasonable estimate of the value of its claimed technology, or else establish that its patented technology drove demand for the entire product." *Id.* at 1329.

The methodologies employed by Mr. Yerman to render his opinions concerning a reasonable royalty in this case are well-established and widely accepted methods for making such an analysis, and Apple does not contend otherwise. As was previously noted, Mr. Yerman applied both an analytical protocol that has been approved by the Federal Circuit and a firmly-entrenched hypothetical negotiation model, applying the well-established *Georgia-Pacific* factors. Importantly, in arriving at his

conclusions, Mr. Yerman did not apply the entire market value rule, which

"allows for the recovery of damages based on the value of an entire

apparatus containing several features, when the feature patented

constitutes the basis for customer demand." *TWC Mfg. Co., Inc.*, 789 F.2d

at 901; *accord, Lucent Techs., Inc.*, 580 F.3d at 1336. Instead, he set

about the difficult task of determining what portion of the value of Siri, and

of the resulting profits realized by Apple through the sale of devices based

upon consumer demand for Siri, are properly attributed to the allegedly

infringing NLP method. Apple's challenges to the opinions of Mr. Yerman

are directed toward his assumptions, and whether the facts and data relied

upon to support his conclusions are legally sufficient.

The points raised by Apple in support of its motion will undoubtedly

provide fertile ground for vigorous cross-examination of the expert. When

an expert's assumptions are unfounded, as Apple now contends, however,

the weight, and not the admissibility, of his opinions is implicated. *Arista

Records LLC v. Lime Grp. LLC*, No. 06-CV-5936, 2011 WL 1674796, at *3

(S.D.N.Y. May 2, 2011) (citing cases). In the end, it will be the jury's

prerogative as to whether to accept or reject, in whole or in part, Mr.

Yerman's opinions. At this juncture, however, I find that Mr. Yerman used

reliable methods for calculating damages, and I do not find the

assumptions made by him in applying those methods to be so unreliable as to require either the striking of his opinion or the scheduling of a *Daubert* hearing.[20] Accordingly, Apple's request to exclude Mr. Yerman's testimony is denied.

### 5.    Untimely Disclosures/Changes in Position

Apple has also moved to strike expert opinions that were either untimely disclosed or represent material changes in position on the part of plaintiffs' experts. *See generally* Dkt. No. 210. The motion requests suppression of opinions offered by Mr. Yerman, plaintiffs' damages expert, and Dr. Jaime Carbonell, who has rendered opinions regarding both infringement and invalidity. *Id.*

### a.    Yerman Report

Mr. Yerman issued an opening expert report on behalf of the plaintiffs regarding damages on December 15, 2014. Dkt. No. 211-3. As was discussed above in part III.A.3. of this decision, in his report Mr.

---

[20]    It is well-established that the decision as to whether to hold a *Daubert* hearing "rests within the sound discretion of a district court." *Northbrook NY, LLC v. Lewis & Clinch, Inc.*, No. 09-CV-0792, 2012 WL 4338740, at *7 (N.D.N.Y. Sept. 20, 2012). Although the Second Circuit has held that "pretrial evidentiary hearings are 'highly desirable' because they allow parties to present expert evidence and conduct cross-examination of the proposed expert," *Colon ex rel. Molina v. BIC USA, Inc.*, 199 F. Supp. 2d 53, 70 (S.D.N.Y. 2001) (citing *Borawick v. Shay*, 68 F.3d 597, 608 (2d Cir.1995)), such hearings become less necessary when the evidentiary record is well-developed. *Colon ex rel. Molina*, 199 F. Supp. 2d at 71. In this case, the record now before the court is sufficient to permit meaningful exercise of my gatekeeping responsibility.

Yerman rendered opinions concerning the damages to which plaintiffs would be entitled in the event of a finding of infringement, applying two alternative constructs. *Id.* While the value of Siri is in many ways pivotal to either analysis undertaken, it was not until a lunch break during Mr. Yerman's deposition, conducted on March 15 2015, that the expert produced a document prepared by him entitled "Siri iPhone Deferred Revenue Analysis," purporting to disclose a gross margin amount for Apple's iPhones attributable to Siri based on the deferred cost of Siri. Dkt. No. 210-1 at 3; Dkt. No. 210-4 at 5; Dkt. No. 210-5. Apple now seeks to preclude Mr. Yerman's reliance upon that deferred revenue analysis during his testimony at trial.

As has been discussed, one step involved in assessing the potential benefits to Apple of licensing the '798 Patent's technology involved Mr. Yerman attempting to quantify the portion of profits realized by Apple that are properly attributable to Siri. *See* Dkt. No. 211-3 at 73-78. After detailing an analysis that is based upon actual gross margins of the relevant Apple products and survey information concerning the importance of Siri to consumers, and arriving at estimates, Mr. Yerman then investigated another alternative method for determining Apple's revenues and profits attributable to Siri using records generated by Apple, in the

ordinary course of its business, that calculate an estimated selling price

("ESP") for unspecified software upgrade rights and non-software support

services.[21] *Id.* at 80-82. Ultimately, however, Mr. Yerman did not offer an

opinion regarding the revenue attributable to Siri based on the internal
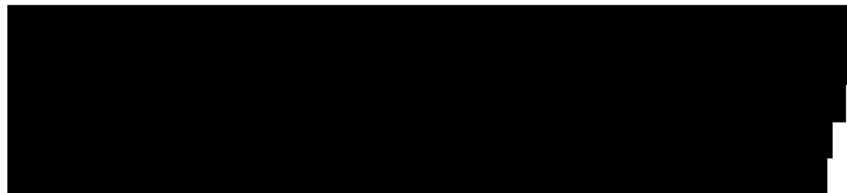
Apple documents, noting the following:



*Id.* at 82.

During the course of discovery, plaintiffs asked the court to compel

Apple to produce, *inter alia*, documents associated with the relative

---

[21]     In a declaration submitted in opposition to a motion by plaintiffs to compel
discovery, Mark Buckley, one of Apple's Finance Managers, explained that



Dkt. No. 133-2 at 2.

valuation of Siri. *See generally* Dkt. No. 123. During a hearing in

connection with plaintiffs' motion, I issued a bench decision in which I

stated the following:

> I will direct that Apple produce any document within
> its possession, custody, or control relative to the
> valuation of Siri and that includes not only
> documents associated with the acquisition of the
> company of Siri but any subsequent documents . . .
> . I will direct that Apple produce all documents and
> information within its possession, custody, or
> control that relate to the calculation of deferred
> revenue and an estimated selling price of Siri and a
> valuation of Siri as spoken to in paragraph 4 of Mr.
> Buckley's declaration[.]

Dkt. No. 155 at 87-88; *see also* Dkt. No. 151 at 8 (directing, in a written

order, Apple to produce "all internal documents and information reflecting

Apple's assessment of Siri's value").

Any prejudice associated with the late disclosure of Mr. Yerman's

deferred revenue analysis is directly attributable to Apple's own conduct

during discovery. In response to the court's order described above, Apple

produced a document, on October 13, 2014, concerning the ESP of Siri

that was so heavily redacted as to render it virtually useless. Dkt. No. 243-

1 at 3; Dkt. Nos. 243-4, 243-5. Though less redacted versions were

produced on November 7, 2014, after plaintiffs objected, much of the

information necessary for calculating the value of Siri remained withheld.

Dkt. No. 243-1 at 4-5. In addition, in the approximately three weeks preceding the deadline for producing Mr. Yerman's opening expert report, Apple supplemented its production with 23,000 pages of survey and financial data. *Id.* at 5. Apple continued to supplement its damages-related document production even after the December 15, 2014 deadline for opening expert reports, and produced more than 23,500 additional pages of materials as late as February 3, 2015. *Id.* at 6. In light of these considerations, Apple should not now be heard to complain of the late disclosure of Mr. Yerman's deferred revenue analysis.

Mr. Yerman's deferred revenue analysis applied a methodology disclosed in his report, calculating an ESP for Siri as approximately the cost of Siri plus a profit margin. Dkt. No. 211-3 at 82. He then, in turn, applied that formula to data provided by Apple in its late disclosures, including deferred cost figures, gross margins, and number of units sold, arriving at a revenue figure and a gross margin figure. Dkt. No. 243-11 at 292-96. It appears that Dr. James Malackowski, Apple's expert, became aware of Mr. Yerman's deferred revenue analysis prior to his deposition and was able to render an opinion regarding its applicability in response to questioning from plaintiffs' counsel. Dkt. No. 243-12 at 50. Given these circumstances, I find no prejudice to Apple resulting from the late

disclosure, and discern no basis to strike portions of Mr. Yerman's opinions based upon his late production of the deferred revenue analysis.[22] *Compare Reilly v. Natwest Mkts. Grp., Inc.*, 181 F.3d 253, 269 (2d Cir. 1999) (affirming district court's preclusion of certain witnesses at trial because the defendant failed to explain why the witnesses were not made available for deposition, the witnesses' testimony at trial would have been cumulative, the plaintiff would have been unfairly prejudiced by not having had a chance to first depose the witnesses, and delaying trial was not warranted in light of the cumulative testimony proffered by the witnesses).

### b.    Dr. Carbonell: New Infringement Theory

In the second prong of its motion, Apple accuses plaintiffs of unfairly shifting their theory of infringement during the course of discovery. Dkt. No. 210 at 15-21. This argument relates principally to the requirement under each of the claims of the '798 Patent that there exists a "metadata database" that stores "case information, keywords, information models, and database values." *See, e.g.,* '798 Patent, 36:37-48. Apple also accuses Dr. Carbonell of interjecting a new theory concerning the "case information" requirement, claiming that Dr. Carbonell has disregarded the

---

[22]    It should be noted, parenthetically, that the deferred revenue analysis relates to only one of the *Georgia-Pacific* factors considered by Mr. Yerman in his report.

court's construction of that term. Dkt. No. 210 at 21-24. As a third aspect of this portion of Apple's motion, it contends that Dr. Carbonell has utilized a construction of the term "without augmentation" that was rejected by the court, referencing supplementation of an inquiry or command by a user. *Id.* at 24-26.

### i.     Metadata Database

Apple complains that plaintiffs' infringement contentions regarding the '798 Patent's requirement of a "metadata database" have shifted over the course of the litigation, and that plaintiffs' latest theory is improperly disclosed for the first time in Dr. Carbonell's rebuttal expert report. Dkt. No. 210 at 15-21. Specifically, according to Apple, "[t]hroughout this litigation, plaintiffs have taken the position that whatever information Siri uses to process natural language—wherever it may reside—corresponds to the claimed 'metadata database.'" *Id.* at 15. In plaintiffs' infringement contentions, served on March 5, 2013, plaintiffs "declined to identify the required metadata database, instead ███████████████████████

████████████████████████████████████

████████████████████████████████████

██████████████████ [23] *Id.* (quoting Dkt. No. 210-10 at 4). Similarly, in

---

[23]     Plaintiffs articulated a similar position in their supplemental disclosure of

interrogatory responses dated November 21, 2014, plaintiffs contended

████████████████████████████████████████████

███████████████████████████████████████████
███████████████████████████████████████████
███████████████████████████████████████████
███████████████████████████████████████████
███████████████████████████████████████████
███████████████████████████████████████████

Dkt. No. 210 at 16 (citing Dkt. No. 210-12 at 9-14). Dr. Carbonell

apparently "continued to advance these same theories" in his opening

report, describing the metadata database searched by iOS Siri to ████████

████████████████████████████████████████████

████████████████████████████████████████████

████████████████████████████████████████

███████████████████████████████████████████

█████████████████ Dkt. No. 217-1 at 24. According to Apple, Dr.

Carbonell's report failed to ████████████████████████

███████████████████████████████████████████

█████████████████████████████ Dkt. No. 210 at 17.

---

infringement contentions, filed on April 28, 2015. Dkt. No. 210-11 at 4.

Apple further advanced this argument by way of its expert report, authored by Dr. James Allen. Dkt. No. 210-13 at 48. Following the disclosure of that report, Dr. Carbonell responded in his January 15, 2015 rebuttal report that ███████████████████████████████████████████████████████

███████████████████████████████████████████[24] Dkt. No. 217-4 at 40. It is this latest disclosure by Dr. Carbonell that Apple contends amounts to a newly minted, previously undisclosed infringement theory.

As Apple argues, a party cannot advance new, previously undisclosed opinions in a rebuttal report, absent circumstances justifying such a belated disclosure. *See, e.g., Ebbert v. Nassau Cnty.*, No. 05-CV-5445, 2008 WL 4443238, at *13 (E.D.N.Y. Sept. 26, 2008) ("A rebuttal expert report is not the proper place for presenting new arguments, unless presenting those arguments is substantially justified and causes no prejudice." (quotation marks omitted)). Having carefully reviewed the chronology, however, I am unconvinced that a drastic new theory has been unveiled by plaintiffs in Dr. Carbonell's rebuttal report. Instead, it appears that the parties' conflict more closely represents a difference of semantics – whether or not certain concepts or terminologies are interchangeable. To the extent Apple asserts otherwise, it had ample

---

[24]     The ███████████ theory was also discussed in Dr. Carbonell's subsequent deposition. Dkt. No. 210-14 at 14-19.

opportunity to address the matter during Dr. Carbonell's deposition, and it

is a matter that can be probed during cross-examination of Dr. Carbonell

at trial. In light of these findings, Apple's request to strike portions of Dr.

Carbonell's report is denied.

### ii.      Case and Case Information

Apple also accuses plaintiffs' expert of applying definitions of the

terms "case" and "case information" that differ from the court's claim

construction of those terms, as a means of avoiding a finding of

anticipation based on prior art. Dkt. No. 210 at 21-24. In my claim

construction determination, I interpreted these two terms as follows:

| Disputed Term | Construction |
|---|---|
| case | a prior use of the natural language processing method |
| case information | information about prior instances of use of the natural language processing method. |

Dkt. No. 104 at 28-32, 44. In settling on these definitions, I rejected

constructions offered by Apple, which would have required that both a

"case" and "case information" include a solution. *Id.* at 30-32. I specifically

noted, however, that the '798 Patent specification associates cases with

problem definitions and solutions, and thus did not exclude solutions from

the type of case structure content comprising case information. *Id.*

Apple now takes issue with Dr. Carbonell's opinion, rendered in his

47

rebuttal report and elsewhere, that the process of constructing cases

requires "'[s]toring aspects of the problem that was just solved together

with . . . the method(s) and optionally intermediate steps to solve the

problem[.]'" Dkt. No. 210 at 22 (quoting Dkt. No. 217-4 at 26-27).

According to Apple, this opinion improperly applies the court's construction

of "case" and "case information" by "requir[ing] stor[age of] not just any

information about instances of use of the method . . . but specifically the

storage of a *solution method*." Dkt. No. 210 at 22 (emphasis in original).

I do not view Dr. Carbonell's construction as being unfaithful to my

determination. In my claim construction decision, I drew upon the

determination of the PTAB in connection with a related IPR proceeding. In

its decision from April 2014, the PTAB agreed that a case is merely a prior

use of the system. Dkt. No. 104 at 31; Dkt. No. 91-1 at 7. I noted that,

because "the specification indicates that a case includes a problem

definition and the solution, with the . . . solution being the user's selection

among the possible choices, the PTAB construed 'case information' to

mean 'information about prior instances of use of the natural language

processing method.'" Dkt. No. 104 at 31-32 (quoting Dkt. No. 91-1 at 7).

There is nothing about that determination that excludes the solution, as

Apple now contends; in fact, to the contrary, the specification and PTAB's

48

decision make it clear that that is the type of information that can qualify as case information. In short, I see no foul in Dr. Carbonell's inclusion of the solution in his definitions of the terms "case" and "case information."

### iii.    Without Augmentation

The last point raised in Apple's motion to strike concerns Dr. Carbonell's use of the term "based on the input, without augmentation." Dkt. No. 210 at 24-26. In my claim construction determination, I found "without augmentation" to mean "based solely on the natural language input without augmentation." Dkt. No. 104 at 18-25, 44. In doing so, I rejected plaintiffs' request to narrowly construe the term as limiting any precluded supplementation solely to input by the user through the addition of information or structure. *Id.*

In its motion, Apple contends that Dr. Carbonell has focused only upon whether there is augmentation by the user to supplement the input. A careful review of Dr. Carbonell's report as a whole, as distinct from the isolated excerpts relied upon by Apple, however, reveals that Dr. Carbonell fully understood that users are merely one possible source of augmentation, and that he did not limit his opinions to augmentation solely by users. Dr. Carbonell's understanding in this regard was confirmed in his deposition. *See* Dkt. No. 212-5 at 88 ███████████████

██████████████████████████████████████████████

████████████████████████████████████████

████████████████████████████████████████████

██████████████████████████████████████

████████████████████████████████████████

Similarly, in his supplemental declaration submitted in opposition to

Apple's motion for summary judgment, Dr. Carbonell expressly disavowed

the limitation that it is solely the user that cannot provide augmentation.

*See* Dkt. No. 241-2 at 14 ████████████████████████

██████████████████████████████████████████

████████████████████████████████████████████████.

Having concluded that Dr. Carbonell's analysis does not re-write or

conflict with the court's construction of the term "without augmentation," I

find no basis to strike portions of his report concerning this topic.

B.    Summary Judgment Motions

1.    Legal Standard Governing Motions for Summary Judgment Generally

Summary judgment motions are governed by Rule 56 of the Federal

Rules of Civil Procedure. Under that provision, the entry of summary

judgment is warranted "if the movant shows that there is no genuine

dispute as to any material fact and the movant is entitled to judgment as a

matter of law." Fed. R. Civ. P. 56(a); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247 (1986); *Sec. Ins. Co. of Hartford v. Old Dominion Freight Line, Inc.*, 391 F.3d 77, 82-83 (2d Cir. 2004). A fact is "material" for purposes of this inquiry, if it "might affect the outcome of the suit under the governing law." *Anderson*, 477 U.S. at 248; *see also Jeffreys v. City of N.Y.*, 426 F.3d 549, 553 (2d Cir. 2005). A material fact is genuinely in dispute "if the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Anderson*, 477 U.S. at 248.

A party moving for summary judgment bears an initial burden of demonstrating that there is no genuine dispute of material fact to be decided with respect to any essential element of the claim in issue; the failure to make this initial showing warrants denial of the motion. *Anderson*, 477 U.S. at 250 n.4; *Sec. Ins. Co.*, 391 F.3d at 83. In the event this initial burden is met, the opposing party must show, through affidavits or otherwise, that there is a material dispute of fact for trial. Fed. R. Civ. P. 56(e); *Celotex*, 477 U.S. at 324; *Anderson*, 477 U.S. at 250.

When deciding a summary judgment motion, a court must resolve any ambiguities, and draw all inferences, in a light most favorable to the nonmoving party. *Anderson*, 477 U.S. at 255; *Tolbert v. Smith*, 790 F.3d

427, 434 (2d Cir. 2015); *Jeffreys*, 426 F.3d at 553; *Wright v. Coughlin*, 132

F.3d 133, 137-38 (2d Cir. 1998). The entry of summary judgment is

appropriate in the event of a finding that there is no genuine dispute as to

any material fact and no reasonable trier of fact could rule in favor of the

non-moving party. *Tolbert*, 790 F.3d at 434*; Bldg. Trades Employers'*

*Educ. Ass'n v. McGowan*, 311 F.3d 501, 507-08 (2d Cir. 2002); *see also*

*Anderson,* 477 U.S. at 250 (finding summary judgment appropriate only

when "there can be but one reasonable conclusion as to the verdict"). In a

case such as this, where parties have interposed cross-motions for

summary judgment, each motion must be independently assessed,

applying the foregoing standard. *See Light Sources, Inc. v. Cosmedico*

*Light, Inc.*, 360 F. Supp. 2d 432, 434 (D. Conn. 2005).

### 2.    Summary Judgment in Patent Infringement Actions

As is relevant to this case, a party commits patent infringement if it

engages in the unauthorized making, using, selling, or offering to sell the

claimed invention in the United States, or importing the claimed invention

into the country. 35 U.S.C § 271(a); *Joy Techs., Inc. v. Flakt, Inc.*, 6 F.3d

770, 773 (Fed. Cir. 1993). Determining the question of infringement

involves a two-step process. *Markman v. Westview Instruments, Inc.*, 517

U.S. 370, 384 (1996); *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448,

1454 (Fed. Cir. 1998), *abrogated on other grounds by Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831 (2015). The first step is claim construction, which is an exercise that presents a legal question for the court.[25] *Markman*, 517 F.3d at 384; *see also Teva Pharm., USA, Inc.*, 135 S. Ct. at 835. Once this is accomplished, the next task is to determine, as a factual matter, whether infringement has occurred. *Markman*, 517 U.S. at 384. While the question of infringement is ordinarily a matter to be submitted to a jury, *id.*, where no genuine dispute concerning a material fact exists for the factfinder, the entry of summary judgment on the issue of infringement in a patent action is proper. *Phonometrics, Inc. v. N. Telecom Inc.*, 133 F.3d 1459, 1463 (Fed. Cir. 1998).

The patent at issue in this case is a method patent. Infringement of a method patent occurs when a defendant carries out "all steps of the claimed method." *Lucent Techs., Inc.*, 580 F.3d at 1317; *see also Limelight Networks, Inc. v. Akamai Techs., Inc.*, 134 S. Ct. 2111, 2117 (2014) ("A method patent claims a number of steps; under this Court's case law, the patent is not infringed unless all the steps are carried out."). In addition, all of the specified steps alleged to collectively constitute

---

[25]    As the Supreme Court has recently reiterated, claim construction occasionally implicates subsidiary factual issues that must be resolved at the claim-construction stage. *Teva Pharm. USA, Inc.*, 135 S. Ct. at 835.

infringement must have been performed within the United States.[26] *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282 (Fed. Cir. 2005).

### 3.   The Parties' Cross-Motions

Both parties have moved for summary judgment with respect to the issue of infringement. *See generally* Dkt. Nos. 209, 212. Apple seeks the entry of summary judgment in its favor in connection with all twenty-one of the '798 Patent's claims. Dkt. No. 212 at 5. In their motion, plaintiffs limit the request to a finding of liability on the question of infringement of Claims 1, 2, 4-6, 9-11, 14, and 21.[27] Dkt. No. 209 at 7. In order to analyze the parties' cross-motions, it is necessary to understand both the '798 Patent and the NLP method employed by Siri.

### a.   The '798 Patent

The two independent claims of the '798 Patent provide a useful backdrop when addressing the question of infringement. Those claims read as follows:

---

[26]    It is undisputed that ████████████████████████████████████████ ████████████████████████ Dkt. No. 242-1 at 74.

[27]    While not officially relinquishing the remaining claims as being asserted in this action, at oral argument plaintiffs' counsel predicted that, in all likelihood, those additional claims would not be resurrected at trial. Dkt. No. 266 at 23.

'798 Patent, Claim 1

    1. A method for processing a natural language input provided by a user, the method comprising:

        providing a natural language query input by the user;

        performing, based on the input, without augmentation, a search of one or more language-based databases including at least one metadata database comprising at least one of a group of information types comprising:

        case information;

        keywords;

        information models; and

        database values;

        providing, through a user interface, a result of the search to the user;

        identifying, for the one or more language-based databases, a finite number of database objects; and

        determining a plurality of combinations of the finite number of database objects.

'798 Patent, Claim 9

    9. A computer-implemented method for processing a natural language input comprising:

        receiving a natural language input;

        providing from said natural language input a plurality of language-based database objects;

        identifying a finite number of permutations of the plurality of database objects, the database objects being stored in a metadata database comprising at least one of a group of information comprising

        case information,

        keywords,

        information models, and

        database values; and

> interpreting at least one of the permutations to
> provide determination of a result of the natural
> language input.

'798 Patent, Claims 1 and 9.

One example of the architecture of the NLP method specified in the

'798 Patent is helpfully illustrated in Figure 2 of the patent, set forth below,

which depicts "a natural language query processor **201** according to one

embodiment of the invention." '798 Patent, 12:52-53.



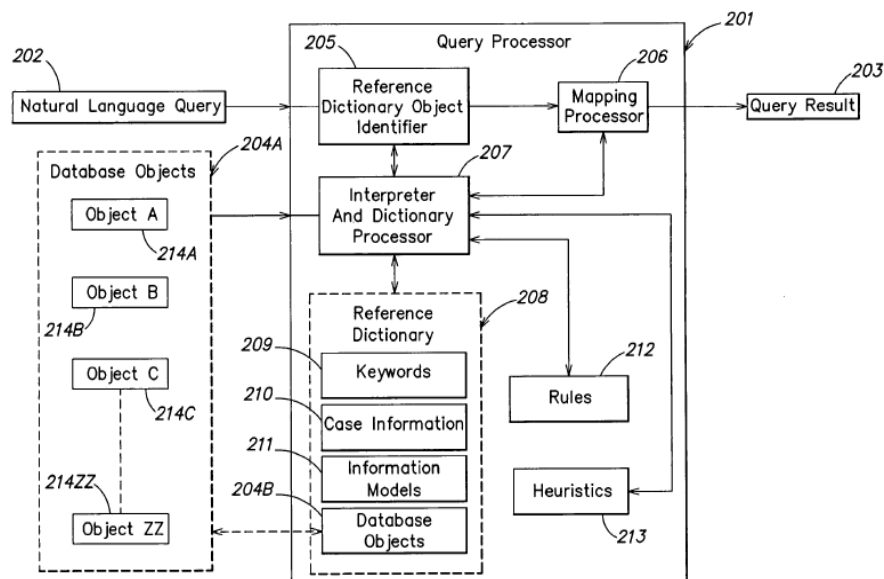FIG. 2

'798 Patent, Fig. 2. In this embodiment, the processor **201** receives a

natural language inquiry and produces a query result **203**.[28] *Id.* at 12:53-

---

[28]    According to the '798 Patent specification, the natural language query can take several forms including, by way of example, "a paragraph, a sentence, sentence fragment, or a plurality of keywords." '798 Patent, 12:55-57.

55. This is accomplished by mapping the query **202** "to the plurality of database objects **204A** using a reference dictionary **208** comprising keywords **209**, case information **210**, information models **211**, and database object values **204B**." *Id.* at 12:60-64. The "query processor **201** includes a reference dictionary object identifier **205** that parses the query **202** and generates one or more objects recognized in the reference dictionary **208**." *Id.* at 13:16-20. The database processor **201** "also accepts and processes a number of database objects **204A**." *Id.* at 13:23-24. Significantly, in the reference dictionary **208**, keywords **209** may be "learned" from the user or may be provided through a separate keyword administrator interface associated with the query processor **201**. *Id.* at 13:24-34.

The query processor **201** also includes an interpreter and dictionary processor **207** that determines optimal interpretations of the received objects, resolves ambiguities, updates information models **211**, and interacts with users to facilitate learning. '798 Patent, 13:35-42. Rules **212** and heuristics **213** are utilized by the processor **207** to resolve ambiguities in determining the optimal interpretation of the query **202**. *Id.* at 13:42-50.

A mapping processor **206** performs a mapping between incoming objects and database objects **204A**, and "may generate database queries

from the objects and interpretations provided by the identifier **205** and the processor **207**, respectively." '798 Patent at 13:52-56. "The processor **206** may, for example, generate [structured query language ('SQL')] queries used to locate database objects **204A**," and those queries may be "executed by an SQL search engine, and the processor **201** may provide query result **203** to the user through, for example, a graphical user interface." *Id.* at 13:56-60.

The '798 Patent is addressed to natural language interfaces to databases. While databases can be and historically were queried by means of a structured query, the '798 Patent method eliminates the need for programmers conversant in SQL or other similar access languages, and instead permits use of a natural language query. The '798 Patent, unlike the prior art, addresses "the issue of linguistic coverage and query disambiguation through direct use of the database, metadata database, and reference dictionary (essentially a specification of the metadata database) and case information." Dkt. No. 217-1 at 15-16. Under the method disclosed in the '798 Patent, four layers of enterprise metadata, or resources, are considered, including cases, keywords, information models, and database values. '798 Patent 8:51-59; *see also* Dkt. No. 217-1 at 17. Plaintiffs' expert, Dr. Carbonell, describes the gist of the '798 Patent

invention as follows:

> [I]nstead of first performing open-ended NLP – a daunting task not yet truly solved, nor even well-approximated – use the database itself, together with the semantic model, to restrict the possible words, word meanings, keywords, and semantic interpretations to a manageable finite set consistent with the user's intent.

Dkt. No. 217-1 at 17. In simple terms, as explained by Dr. Carbonell, the process of first performing open-ended NLP, without reference to available databases, as was traditionally done, "is much too difficult and error-prone." *Id.* The '798 Patent method "use[s] the database itself, together with the semantic model to . . . tailor the interface to the database and the metadata that describes it." *Id.* In simple terms, the '798 Patent processes a natural language query by accessing databases, extracting information from those databases, and then using the extracted information from the underlying databases to interpret the natural language query.

b.     Apple's Siri

Apple's iOS Siri is an interface that enables the user to implement computer tasks, using natural language, by providing an interface that can process natural language inputs. Dkt. No. 200-11 at 2; Dkt. No. 242-1 at 29. Apple describes Siri as a personal assistant designed to perform various tasks for the user, "such as making restaurant reservations,

purchasing movie tickets, sending emails, and making telephone calls."

Dkt. No. 212-3 at 4; Dkt. No. 212-11 at 2. In general terms, to perform

these functions, ███████████████████████████████

███████████████████████████████████████

███████████████████████████████████

███████████████████████████████████

███████████████████████████████████

███████████████████████████████████

██████ █████████████████████████

███████████████████████████████████

██████████████████████████████

████████████████

████████████████████████████

█████████████████████████████

█████████████████████████ ██████████

─────────────────

29    According to Dr. Allen, ████████████████████
████████████████████████████████████
████████████████████████████████████
_Id._

30    As Adam Cheyer, one of Siri's creators, has explained,

Dkt. No. 209-17 at 2-3.

[31]    Dr. Carbonell

████████████████████████████████████████

██████████████████████████████████████

█████████████████████████████████████████

███████████████████████████████████████████

███████████████████████████████████████████

████████████████████

Apple's position, both in opposing plaintiffs' summary judgment

motion and in support of its own request for dismissal of plaintiffs' claims,

is ███████████████████████████████████████████

██████████████████████████████████████

██████████████████████████████████████████

███████████████████████████████████████████

██████████████. *See generally* Dkt. No. 212. Specifically, Apple contends

████████████████████████████████████████████

███████████████████████████████████ *Id.* at 26-29.

c.    Analysis

Pivotal to the question of whether Apple's Siri infringes the '798

Patent is whether Siri includes at least one metadata database containing

case information, keywords, information models, and database values.

There exists a fundamental disagreement between the parties' experts,

supported by their citation of evidence within the record now before the

court, concerning this threshold question.[33] Plaintiffs' expert, Dr. Carbonell,

has reviewed source code for various releases of Apple's Siri and opines

that the method employed by Siri includes a search of one or more

language-based databases, including at least one metadata database

comprised of at least one of the group of information types comprising

case information, keywords, information models, and database values.

Dkt. Nos. 217 at 4-9; 217-1 at 23-24. Addressing the first part of that

inquiry, Dr. Carbonell states the following:



---

[33]     Apple appears to contend that there can only be one metadata database under the '798 Patent. The '798 Patent specification, however, makes it clear that there can be more than one metadata database implicated. *See, e.g.,* '798 Patent, Claim 1 ("A method for processing a natural language input . . . the method comprising. . . performing, based on the input. . . a search of one or more language-based databases including *at least one* metadata database comprising one of a group of information types comprising: case information; keywords; information models; and database values[.]" (emphasis added)). It is equally clear, however, that for infringement to be proven, at least one of those metadata databases must contain all four of the types of data prescribed in the patent. *Id.*

███████████████████████████████████████

████████████████████████████████████████████

████████████████████████████████████████

████████████████████████████████████████

█████████████████████████████████

Dr. Carbonell notes that, in performing its function, Siri accesses all four types of the information specified in the '798 Patent. Dkt. No. 217-1 at 23-29. ████████████████████████████████

███████████████████████████████████

████████████████████████████████████

█████████████████████████████████████████

████████████████████████████████████████

████████████████████████████████████

████████████████████████████████

████████████████████████████████████

████████████████████████████████

---

34   Dr. Allen disagrees with this assertion, █████████████████████
████████████████████████████████████████████
████████████████████████████████████████████
████████████████████████████████████████████
████████████████████████████████████

███████████████████████████████████████████████

███████████████████████████████████████████████

████████████████

Responding to Dr. Allen's expert report, Dr. Carbonell characterizes

the single database containing all four of the specified types of metadata

as ███████████████████████████. Dkt. No. 217-4 at 40-41.

According to Dr. Carbonell, "[d]atabases are organized electronic stores of

information."[35] Dkt. No. 217-1 at 10. Dr. Carbonell goes on to explain as

follows:

> Databases can be very large and stored in a server
> farm or on the cloud, or can be relatively small and
> personalized and stored on a communication
> device such as a smart phone. There is great

---

[35]     The parties have not asked the court to construe the term "database." Plaintiffs and Apple appear to be at least in partial agreement that a database, as understood by a person of ordinary skill in the art, is an organized collection of stored data, and that information in a database can be retrieved through a search using that organizational scheme. *See* Dkt. Nos. 217-1 at 10-12; 241-1 at 136-42; 241-2 at 2-6; 212-3 at 16. This is consistent with the ordinary and customary meaning of database attributed by various courts. *See, e.g., Vasudevan Software, Inc. v. Int'l Bus. Mach. Corp.*, No. 09-CV-5897, 2011 WL 196884, at *1, 2 (N.D. Cal. Jan. 20, 2011) (concluding that "database" is "a structured set of data"); *Visicu, Inc. v. iMDsoft, Ltd.*, No. 07-CV-4562, 2009 WL 1291330, at *12 (E.D. Pa. May 7, 2009) (concluding that a database is "an organized collection of electronic information"); *Transcenic, Inc. v. Google, Inc.*, 7 F. Supp. 3d 405, 411 (D. Del. 2013) (finding that a "database" is "a collection of data organized for search and retrieval by a computer"). According to Dr. Carbonell, Apple's expert interprets "database" incorrectly to mean or include a "database management system." Dkt. No. 241-2 at 5-6. Dr. Carbonell describes databases as organized electronic stores of information, observing that there can be many types of databases ranging from relational and object-orientated databases to document stores and indexed image repositories. Dkt. No. 217-1 at 10. In addition, according to plaintiffs' expert, a database can be either transient or persistent. Dkt. No. 241-2 at 3.

> variation in the type of information stored in databases, the length of time that the data are stored before being updated, overwritten or discarded, and in the modes of accessing the content of the database.

*Id.* at 10-11. "Some databases are part of or implemented in a particular programming language" such as Java. *Id.* at 14. In addition, data stores in programming languages are a type of database. *Id.* According to Dr. Carbonell, ██████████████████████████████████████ ████████████ *Id.* at 13.

Placed in more simple and readily understood terms, according to Dr. Carbonell,

██████████████████████████████████████████████

Dkt. No. 241-2 at 7. Additional record evidence supports plaintiffs' position. For example, in an expert report prepared in connection with the Apple litigation against Samsung, Apple's expert described Siri as follows:

███████████████████████

Dkt. No. 241-30 at 7.

In sum, Dr. Carbonell opines that Siri possesses a metadata

database that consists of ████████████████

████████████████████████

████████████████████████

███████████████████████ thus

satisfying the requirements of the '798 Patent. Dkt. No. 241-2 at 6.

The theories advanced by Dr. Carbonell are sharply disputed by

Apple's expert, Dr. Allen, who opines ████████████

████████████████████████

████████████████████████

████████████████████████

████████████████████████

██████████ *Id.* at 32. According to Dr. Allen,

Dkt. No. 212-3 at 16 (citations omitted).

The record in this case, including the competing presentations of the parties' respective infringement experts, highlight the existence of a pivotal issue of fact that must be determined before the issue of liability can be addressed. Only after a jury has determined whether Apple's Siri, in performing its NLP function, consults with a metadata database containing case information, keywords, information models, and database values can the question of infringement be decided. The portions of the parties' summary judgment motions addressing this issue will therefore be denied.

Leaving aside this threshold issue, Apple contends that there are additional reasons why Siri does not infringe certain of the '798 Patent's claims and that summary judgment should be granted at least with regard to those claims. Specifically, it argues that Claims 1 through 8 of the '798 Patent are not infringed because

██████████████████████████████████████████████

████. Apple further contends that Siri does not infringe Claims 9 through

21, claiming that there is no evidence that ████████████████████

██████████████████████████████████████████████

███████████████████████

    Addressing the first argument, Dr. Carbonell notes ████████████

██████████████████████████████████████████

█████████████████████████████████████████

███████████████████████████████████████████

████████████████████████████████████████

████████████████████████████████████████

███████████████████████████████████████████

███████████████████████████████████████████

██████████████████████████████████████

████████████████████████████████████████████

██████████████████████████████████████████████

██████████████████████████████████████

███████████████████████████████████████████

██████████████████████████████████████████

██████, thereby precluding the issue of summary judgment on this

question.

Apple's next argument implicates the well-established principle that,

for a direct infringement of a method patent to occur, a defendant must

carry out "all steps of the claimed method." *Lucent Techs., Inc.*, 580 F.3d

at 1317. Apple argues that the '798 Patent includes the step of providing

an input, and that this step is performed by the user. Accordingly, Apple

contends, because that step is not performed by Siri, it cannot be held

liable for infringement. This argument, however, is foreclosed by the

court's earlier claim construction decision, in which I noted the following:

> While I agree in principle with plaintiffs' position
> that the patented method does not call for the
> human user to perform a step of the computer's
> natural language processing, I do not believe that
> defendant's proposed construction conjures such
> an interpretation. In my view, and in light of the
> specification, the phrase 'providing a natural
> language query input by the user' does not suggest
> that the user performs a part of the patented
> method, but instead communicates that the method
> begins, and is prompted, by the user providing a
> 'natural language input.'

Dkt. No. 104 at 16-17 (footnote omitted). In that decision I went on to

clarify that

> [t]here is nothing in the language of the claims,
> including independent Claim 1, to suggest that the
> method specified includes the additional step of the

> user inputting the query. The preamble to Claim 1
> specifies [a] method for processing a natural
> language input provided by a user, the method
> comprising . . . . '798 Patent, 36:38-39. This
> language implies that the natural language input
> has been supplied by the user, through the method
> disclosed in Claim 1, prior to processing.

*Id.* at 17 n. 6. For the reasons previously cited, I reiterate my finding that

the providing of an input by a user is not a step required under the '798

Patent. This portion of Apple's motion therefore also fails.

Apple's next and final argument is centered on Claims 9 through 21

and the distinction between Claim 9, which requires permutations of

database objects, and Claim 1, which references combinations. Apple

argues that the plaintiffs cannot cite any evidence demonstrating that Siri

identifies permutations of database objects.

In his expert report, Dr. Carbonell opines that Siri meets this

limitation of Claim 9. Dkt. No. 217-1 at 39-41. More specifically, Dr.

Carbonell explains ███████████████████████████████

████████████████████████████████████████████████

████████████████████████████████████████████████

*Id.* at 40. It is therefore clear that, at a minimum, when the evidence is

considered in the light most favorable to plaintiffs as to whether or not this

limitation of Claim 9 is satisfied, an issue of fact exists, thereby precluding

the entry of summary judgment in Apple's favor on this issue as well.

Based upon careful review of the record now before the court, I conclude that a genuine dispute of material fact exists as to whether or not Siri, in its NLP, consults one or more metadata databases that contain the four types of information specified in the '798 Patent. In addition, there are genuine issues of fact that preclude the entry of partial summary judgment based upon Apple's arguments that ████████████████████████████ ████████████████████████████████████████████ ███████████████████████████████████████████████████ ██████████████. These issues, upon which the question of infringement hinge, preclude the entry of summary judgment in favor of either party, and instead necessitate that the matter be set down for trial. Accordingly, both parties' cross-motions for summary judgment are denied.

## IV.   SUMMARY AND CONCLUSION

Addressing first the pending non-dispositive motions, I conclude that the report submitted by plaintiffs' damages expert, Mr. Robert Yerman, satisfies the requirements of Rule 702 of the Federal Rules of Evidence, as well as *Daubert* and its progeny, and therefore will not be stricken from the record. With respect to the remaining motions to strike, I find no basis to preclude any portions of the expert testimony of Dr. James Allen and

Dr. Jaime Carbonell, nor do I conclude that portions of Mr. Yerman's report should be stricken on the basis of his allegedly late disclosure of calculations regarding the value of Siri. Turning to the parties' cross-motions for summary judgment, I conclude that the record discloses material disputes of fact, including, critically, whether Siri's NLP consults one or more metadata databases containing case information, keywords, information models, and database values, that must be resolved at trial.

Based upon the foregoing it is hereby

ORDERED as follows:

(1)     Plaintiffs' motion to strike the invalidity report and selected invalidity and damages opinions of Dr. James Allen (Dkt. No. 203) is DENIED.
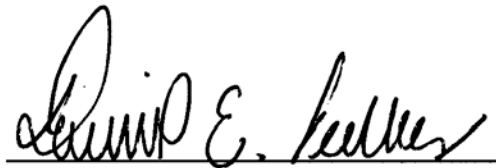
(2)     Defendant's motion to strike untimely disclosed or improper expert reports (Dkt. No. 197) is DENIED.

(3)     Defendant's motion to preclude the testimony of Robert M. Yerman (Dkt. No. 196) is DENIED,

(4)     Plaintiffs' motion for partial summary judgment on the issue of infringement with regard to Claims 1, 2, 4-6, 9-11, 14, and 2 of the '798 Patent (Dkt. No. 200) is DENIED.

(5)     Defendant's motion for summary judgment on the issue of

infringement (Dkt. No. 195) is DENIED.

Dated:      January 6, 2016
            Syracuse, New York

David E. Peebles
U.S. Magistrate Judge